

**DETAILED DESCRIPTION OF HIGHWAY ELEMENT OF
NO PROJECT ALTERNATIVE**

APPENDIX 2-A**DETAILED DESCRIPTION OF HIGHWAY ELEMENT OF
NO PROJECT ALTERNATIVE****Highway Element of No Project Alternative****A. EXISTING HIGHWAY SYSTEM**

As identified in Table 2-A-1 and illustrated in Figure 2-A-1, several interstate and U.S. highways and state routes play a central role in intercity travel in California. These highways vary in size, from a four-lane State Route 152 (SR-152) through the coastal mountains to the multi-lane Interstate 5 (I-5) that forms a main transportation artery from Mexico to Canada.

While some routes traverse the entire study area, as in the case of I-5, many of the other routes provide a connection between various regions in California. Examples of this type of highway include the many east-west routes that bisect the Central Valley, connecting communities in the Sierra foothills with coastal cities, the Bay Area, and Monterey Bay. Other routes that provide key intercity links are those running between Los Angeles, Orange and Riverside Counties, and San Diego County in the southern part of the state. The California highway system serving the intercity travel market of the proposed high-speed train system includes the following routes discussed below.

Table 2-A-1
California Intercity Highway System

Interstate Highways	U.S. Highways	State Routes
Interstate 5 (I-5)	U.S. Highway 101 (US-101)	State Route 14 (SR-14)
Interstate 8 (I-8)		State Route 58 (SR-58)
Interstate 10 (I-10)		State Route 65 (SR-65)
Interstate 15 (I-15)		State Route 91 (SR-91)
Interstate 80 (I-80)		State Route 99 (SR-99)
Interstate 105 (I-105)		State Route 120 (SR-120)
Interstate 205 (I-205)		State Route 152 (SR-152)
Interstate 215 (I-215)		
Interstate 405 (I-405)		
Interstate 280 (I-280)		
Interstate 580 (I-580)		
Interstate 680 (I-680)		

Figure 2-A-1
California Intercity Highway System



Interstate 5

I-5 is an intrastate and regional transportation corridor that extends the entire width of the United States from Mexico to Canada. It serves as the backbone of the California transportation highway network connecting the major urban centers of San Diego, Orange County, Los Angeles, and Sacramento. It is used as a commuter route between employment and residential areas from county-to-county and from region-to-region. I-5 is used for inter-regional, intra-regional, interstate, and international travel and goods movement. I-5 was designed and built as one of the first interstate highways in the federal highway system. Much of I-5 was constructed prior to the federal commitment to funding an interstate system in 1956.

Interstate 8

I-8 is the southernmost east-west interstate highway located in California, operating from San Diego to Arizona. This highway provides access for a considerable number of regional and interstate trips between these two states. Within California, I-8 runs through the Mission Valley area of San Diego, serving San Diego State University and Qualcomm Stadium and connecting these areas to residential communities located in eastern San Diego County.

Interstate 10

I-10 traverses across the U.S. from Santa Monica, California to Jacksonville, Florida. It is the primary east-west intercity highway in Southern California, connecting Los Angeles County with urban areas in San Bernardino and Riverside Counties. As a major transcontinental route, I-10 also carries a tremendous amount of interstate passenger and freight traffic through the Southern California region. Metrolink and freight trains use tracks that are located in the median of I-10 in Los Angeles County, and the Los Angeles County Metropolitan Transportation Authority El Monte Busway is located between El Monte and downtown Los Angeles.

Interstate 15

I-15 is north-south facility and extends between California, Nevada, and several mountain states and Canada. I-15 is a major intercity travel corridor from Southern California to Las Vegas, Nevada and Utah. Within Southern California, this route provides a key intercity linkage between residential and employment centers in San Diego, Riverside, and San Bernardino Counties.

Interstate 80

I-80 is one of the primary east-west transcontinental interstates, crossing the U.S. from San Francisco to New York City. Within California, I-80 connects the San Francisco Bay Area with Sacramento and the upper San Joaquin Valley. I-80 provides access for local and regional trips as well as interstate travel. This route functions as a primary regional commuter route and facilitates inter-regional (Bay Area and Sacramento areas) commuter trips. In addition to commuter traffic, I-80 is also a key route for interstate goods movement. Considerable intra- and interstate recreational travel also occurs along I-80 between the Bay Area, Sacramento, and the Lake Tahoe/Reno area at the California/Nevada border.

Interstate 105

I-105, known as the "Century Freeway" is an east-west route that connects the Los Angeles International Airport with southern Los Angeles County communities as well as I-5, I-110, and I-405. This highway was completed in 1993 and is the most recent major interstate freeway constructed and the last planned for Southern California. In addition, Los Angeles County Metropolitan Transit Authority (MTA) operates the Green Line Metro Rail (light rail trains) in the median of I-105.

Interstate 205

I-205 runs from the junction of I-580 to I-5 near Tracy where it continues east as SR-120. This route provides the primary access to I-5 for Bay Area intercity trips to the Central Valley and Southern California.

Interstate 215

I-215 was constructed in 1972 when portions of I-15 were re-aligned, and serves north-south traffic in San Bernardino and Riverside Counties. This route directly serves the cities of Riverside and San Bernardino. Later sections of the freeway were constructed from the 1970s through 1996.

Interstate 405

I-405 is also known as the "San Diego Freeway" even though this route does not directly serve San Diego. I-405 provides a critical regional link for intercity travelers through the South Bay and the beach cities of Orange County. I-405 extends from the junction of I-5 in San Fernando through western Los Angeles County and Orange County, terminating at the junction of I-5 near Irvine. I-405 is a major link to other freeways that provide access to both Los Angeles International Airport and John Wayne/Orange County Airport, and the ports of Los Angeles and Long Beach.

Interstate 280

I-280 was completed in 1973 to connect San Francisco and San Jose down the western side of the Peninsula along the San Francisco Bay. A portion of I-280 through the foothills and valleys of San Mateo County is designated as a scenic highway. I-280's primary function is as a reliever route for regional and intercity traffic on US-101.

Interstate 580

I-580 is a multi-functional facility that connects the Central Valley with the Bay Area. Portions of this route through the Altamont Pass area have been in use as a highway route since 1938. The full length of the highway extends from San Rafael in Marin County to the I-5/SR-120 interchange near Tracy. This major regional route has become a key commuter corridor, linking residential communities in the Central Valley and Contra Costa County with employment centers in Alameda and Santa Clara County. I-580 is also a primary intrastate goods movement route between the Central Valley and the Bay Area.

Interstate 680

I-680 links communities in Contra Costa, Solano, and Santa Clara Counties east of San Francisco. This interstate highway is the primary east-west corridor for Contra Costa County residents. I-680 serves San Jose, where it becomes I-280 and is a major commuter route into Santa Clara County. I-680 also serves many intercity trips through connections with other highways such as I-80 and I-580 that provide access to the Central Valley, Sacramento, and San Francisco.

Interstate 805

I-805 extends from the City of La Jolla in the north and continues south to the international border with Mexico. I-805 provides an additional inland route, essentially paralleling I-5 to downtown San Diego. I-805 is accessed by both San Diego State University and Qualcomm Stadium and also bisects Mission Valley and University Town Center.

Interstate 880

I-880 extends between Oakland and San Jose in Alameda and Santa Clara Counties. This highway is a major regional commuter corridor, providing access from residential communities in

Alameda County to San Francisco, as well as the rapidly growing "Silicon Valley" employment areas located in Fremont, Milpitas, and San Jose. I-880 provides a key access route for interstate and international freight hubs, including the Port of Oakland and international airports in Oakland and San Jose. A portion of I-880 in Oakland was destroyed in the 1989 Loma Prieta Earthquake and was reconstructed along a new alignment that opened in 1997.

State Route 14

SR-14 extends northeast from the San Fernando Valley in Los Angeles County through Palmdale to the Mojave Desert. SR-14 provides a critical southwest to northeast link between the established urban areas of Los Angeles County and newer communities in the Antelope Valley. In addition, this route functions as a secondary linkage between Southern California and Palmdale, Lancaster, Bakersfield, and the Central Valley. When snow or other climatic conditions cause the closure of I-5, SR-14 becomes the primary highway route to the Central Valley.

State Route 58

SR-58 provides access from the Central Coast to the Central Valley and the Mojave Desert regions. SR-58 is a major commuter route within the city of Bakersfield. The highway also carries a considerable amount of intercity traffic to destinations east of Bakersfield, including the area surrounding Edwards Air Force Base and I-15.

State Route 65

SR-65 is a mostly rural highway (with the exception of a freeway section in Porterville) that is situated roughly parallel to SR-99 in the Central Valley. The route of SR-65 starts near Bakersfield and continues north to terminate near SR-99 and SR-198 near Visalia. A second segment of SR-65 exists from I-80 near Roseville to SR-70 near Marysville.

State Route 91

SR-91, known as the "Riverside Freeway," is an intercity route located in Southern California, extending from the Los Angeles County to the I-215/SR-60/SR-91 interchange. SR-91 in Orange County exists as both a freeway and a toll route (through Santa Ana Canyon), with several lanes in each direction dedicated for vehicles with a toll transponder.

State Route 99

SR-99 is the primary north-south highway for Central Valley residents traveling between the Upper Sacramento Valley and the San Joaquin Valley. SR-99 passes through all major cities in the Central Valley, including Marysville, Sacramento, Stockton, Modesto, Fresno, and Bakersfield. SR-99 carries a large amount of intercity passenger and freight traffic.

State Route 120

SR-120 extends eastward from the junction of I-5 in Tracy to Mono Lake. It provides access for Bay Area residents traveling to Yosemite National Park, and serves a large number of intercity and recreational trips (heaviest in the summer months and holidays).

State Route 152

SR-152 functions as a key east-west corridor between the fast growing residential communities in the Central Valley near Los Banos and the high-tech employment area of Santa Clara County. SR-152 also provides access for residents of Santa Cruz and Monterey Counties traveling to the Central Valley. While serving a large number of intercity trips, a considerable and increasing number of trips are made by commuters.

State Route 163

SR-163 is a regional state highway located in San Diego County. SR-163 originates in the north near the Miramar Naval Station and I-15. SR-163 primarily runs north south, running through Mission Valley and Balboa Park terminating in downtown San Diego with a connection to I-5.

U.S. Highway 101

US-101 is a major intercity route, providing access for travelers from Washington to Los Angeles. This highway functions as a high-speed alternative to SR-1 for travel along the coast of California. In many urban areas US-101 also serves as a major regional route for commuter travel.

B. NO PROJECT HIGHWAY SYSTEM

Funded and programmed improvements on the intercity highway network considered in this study are based on financially constrained regional transportation plans (RTPs) developed by Regional Transportation Planning Agencies. Intercity highway improvements included as part of the No Project Alternative include infrastructure projects as well as intelligent transportation system (ITS) and other potential system improvements programmed to be in operation by 2020. The funded and programmed improvements are identified by county in the following list.

The following RTP documents were reviewed in developing the list of financially constrained projects expected to be in operation by 2020.

- *1999 Metropolitan Transportation Plan*, Sacramento Area Council of Governments (SACOG), July 15, 1999.
- *1998 Final Regional Transportation Plan for the San Francisco Bay Area*, Metropolitan Transportation Commission (MTC), Adopted October 28, 1998, Amended May 26, 1999
- *1998 Regional Transportation Plan*, Merced County Association of Governments (MCAG), September 17, 1998
- *1998 Regional Transportation Plan*, Council of Fresno County of Governments, October 29, 1998
- *1998 Regional Transportation Plan*, Stanislaus Area Association of Governments, December 9, 1998
- *Draft San Benito County Regional Transportation Plan*, Council of San Benito County Governments, July 2000.
- *1998 Regional Transportation Plan*, San Joaquin Council of Governments, August 27, 1998.
- *1998-2018 Regional Transportation Plan*, Tulare County Association of Governments (TCAG), November 23, 1998.
- *1999 Regional Transportation Plan*, Kings County Association of Governments (KCAG), December 1999.
- *1998 Regional Transportation Plan*, Kern Council of Governments (KCOG), September 1998.
- *1998 Regional Transportation Plan, Community Link 21*, Southern California Association of Governments, April 16, 1998.
- *2001 Draft Regional Transportation Plan Update, Community Link 21*, Southern California Association of Governments (SCAG), December 14, 2000.
- *2020 Regional Transportation Plan*, San Diego Association of Governments (SANDAG), April 2000.

Alameda County

- I-580/I-205 truck separation lane
- SR-84 (Isabel realignment) and I-580/Airway interchange improvements
- I-238 westbound widening between I-580 and I-880
- I-238 eastbound widening between I-580 and I-880
- I-580 eastbound auxiliary lane, ramp meters (Tri-Valley)
- Complete I-880 high-occupancy vehicle (HOV) lanes to Santa Clara County
- SR-262/I-880 Mission Boulevard—reconfigure roadway and interchanges, add HOV lanes on I-880
- I-880 interchange improvements with ramp meters
- SR-84 upgrade to expressway between SR-238 and I-880
- SR-238 Hayward Bypass (Stage 1)

San Mateo County

- US-101 auxiliary lanes from Marsh Road to SR-92
- US-101 auxiliary lanes from Third Avenue to Grand Avenue
- US-101 interchange improvements

Santa Clara County

- US-101 auxiliary lanes from SR-87 to Trimble Road
- Montague Expressway widening from I-680 to US-101 with improved HOV lanes
- Widen US-101 to six lanes from South San Jose to Morgan Hill
- SR-85/US-101 interchange improvements
- SR-152 safety improvements

Sacramento County

- Widen SR-99 from I-5 to Elkhorn Boulevard in Sacramento
- New or Improved Interchanges at SR-99 and Elkhorn Blvd., Riego Road, Elverta, SR-20, and I-5
- New or Improved Interchanges at SR-70 and Algodon, Feather River
- SR-99 southbound carpool lanes, continuing existing lane; from Martin Luther King, Jr. to B Street
- SR-99 South Interchange Improvements at Grantline Road, Sheldon Road, and Walnut Avenue
- Interchange Improvements at I-5 and Road 102, Richards Blvd., El Camino, I-80, and Cosumnes River Blvd.
- I-5 carpool lanes from I-80 to Sacramento International Airport and from Laguna Blvd. to J Street

- New I-5 interchanges at North Market Blvd., Bannon Street, and Northgate Blvd., in Sacramento, and at Spa Road
- Add auxiliary lanes on I-5 from I-80 to North Market Blvd. and from Del Paso Road to SR-99 in Sacramento

Merced County

- SR-152—Los Banos bypass right-of-way acquisition
- SR-152—Los Banos bypass Phase 1 Construction
- SR-99—Realign SR-99, improve 140/99 interchange, new ramps, connect 16th Street to Yosemite Parkway
- SR-99—Sandy Mush Interchange
- SR-99 from Madera County to Buchanan Hollow—Upgrade to freeway
- SR-99—Construct Arboleda interchange
- SR-99 from Buchanan Hollow to Owens Creek—Upgrade to freeway.
- SR-99—Delhi Freeway Project
- SR-99 from Owens Creek bridge to 0.4 kilometers (km) south of Childs Avenue overcrossing—Upgrade from 4-lane expressway to 4-lane freeway
- SR-99—Construct interchange at Campus/Healy
- SR-99 from north Atwater overhead to Arena Way—Upgrade from 4-lane expressway to 4-lane freeway.
- SR-99—Construct interchange at Westside Boulevard
- SR-99 from Arena Way to 0.5 km north of Dwight Way—Upgrade to 4-lane freeway
- SR-99—Construct interchange at Sultana
- SR-99—Modify Ramps with one couplets on 13th & 14th Streets

San Joaquin County

- I-5 (Stockton)—Add northbound (NB) auxiliary lane Monte Diablo to Country Club
- I-5 (Stockton)—Widen to 8 lanes, from Monte Diablo Avenue undercrossing to Hammer Lane. Add auxiliary lane, possible HOV lanes
- I-5 (County)—From I-205 to SR-120 NB, widen bridge to 5 lanes
- I-5 (Stockton)—From Hammer Lane to Eight Mile Road, widen to 8 lanes, add auxiliary lanes and possible HOV lanes
- SR-99 (Stockton)—Widen to 6 lanes, Hammer to north of Crosstown Freeway. Widen and reconstruct ramps
- SR-99 (Stockton)—Widen to 6 lanes using inside median, Arch Road to Main Street (South boundary: Crosstown/99 Interchange)
- SR-99 (Manteca-Stockton)—Widen to 6 lanes in median from SR-120 to Arch Road
- I-580 (County)—Widen to 6 lanes from Patterson Pass to Alameda County Line
- I-5 (Stockton)—Add NB auxiliary lane Monte Diablo to Country Club

Stanislaus County

- SR-99 from Taylor Road to Service Road—Keyes Stage II highway planting
- SR-99 at Hatch Road overcrossing—Construct soundwall east side
- SR-99 at Pelandale interchange—Reconstruct to widen from 2 to 4 lanes

Fresno County

- SR-99 from Ventura Street to Madera County Line—Rehabilitate Roadway
- SR-99 from California Avenue to Olive Avenue—Upgrade irrigation and planting
- SR-99 near Coalinga (south of SR-33)—Replace Culvert/Channel
- SR-99 from south of Jensen Avenue to Ventura Street—Construct SB auxiliary lane
- SR-99 at SR-99/Grantland Avenue Diagonal—Construct interchange
- SR-99 from Clinton Avenue to Ashlan Avenue—Construct overcrossing at Shields Avenue
- SR-99 from 0.3 south of the South Pacific & Biola Junction Bridge to Madera County Line—Upgrade from 4-lane freeway to a 6-lane freeway
- SR-99 from (Fresno/Tulare County) Goshen overhead to SR-201—Upgrade from 4-lane freeway to a 6-lane freeway
- SR-99 from SR-201 to Floral—Upgrade from 4-lane freeway to a 6-lane freeway

Los Angeles County

- HOV Project on SR-14 (Ave P-8 to Ave-L)
- HOV Project on I-710 (I-10 to I-210)
- HOV Project on I-5 (SR-19 to I-710)
- I-710 (I-10 to I-210) Additional Mixed Flow Lane
- I-5 (Rosecrans to Orange County) Additional Mixed Flow Lane
- I-405 (US-101 to I-105) Additional Mixed Flow Lane
- SR-57 (SR-60 to Orange County) Additional Mixed Flow Lane
- Regional Project—Maglev System (Los Angeles International Airport [LAX] to March by 2010)

Orange County

- HOV Project on I-5 (SR-1 to Avenida Pico)
- I-5 (SR-91 to Los Angeles County) Additional Mixed Flow Lane
- SR-91 (westbound auxiliary lane SR-57 to I-5) Additional Mixed Flow Lane
- SR-91 (auxiliary lanes SR-241 to SR-71) Additional Mixed Flow Lane
- SR-57 (auxiliary lanes Los Angeles Co to SR-91) Additional Mixed Flow Lane

Riverside County

- HOV Project on I-15 (San Bernardino County to SR-91)
- HOV Project on I-215 (San Bernardino County to SR-60/I-215/SR-91)
- HOV Project on I-215 (I-15 to south of Nuevo)

- HOV Project on I-215 (East Junction SR-60/I-215 to Ramona Expressway)
- I-215 (I-15 to south of Nuevo) Additional Mixed Flow Lane

San Bernardino County

- HOV Project on SR-71 (San Bernardino County to SR-60)
- HOV Project on I-10 (I-15 to Riverside County)
- HOV Project on I-215 (Riverside County to I-10)
- HOV Project on I-215 (SR-30 to I-15)
- HOV Project on I-15 (Riverside County to D Street)

San Diego County

- I-5 at I-805—New interchange with 10 freeway and 2 HOV lanes
- I-5 from Mission Bay Drive to SR-52—Addition of a northbound auxiliary lane
- I-5 at SR-78 Interchange: NB-eastbound (EB) Connector—Widen auxiliary lane and ramp
- I-15 from SR-163 to SR 78—Addition of auxiliary lanes and meters, Bridge widening
- I-15 from SR-56 to Centre City Parkway—Addition of 4 HOV/Managed lanes
- 15 Regional Arterial Projects—11 roads and 4 interchanges
- I-5 from Del Mar Heights Road to Birmingham Drive—Upgrade from existing 8-lane freeway to 12-lane freeway and 2 HOV lanes
- I-15/SR-56 Interchange Ramp (EB-NB)—Loop ramp
- SR-94/125 Interchange and SR-125 Widening—Upgrade from 6-lane freeway to 8-lane freeway with new interchange
- Intelligent Transportation Systems: Enhanced Incident/Emergency Response, Traveler/Commercial Vehicle Operations Information, and Management System Software
- I-5 from Del Mar Heights Road to Encinitas Boulevard—Upgrade from 8-lane freeway to 12-lane freeway and 2 HOV lanes
- I-5 from Encinitas Boulevard to La Costa Boulevard—Upgrade from 8-lane freeway to 10-lane freeway and 2 HOV lanes
- I-15 from SR-163 to SR-56—Addition of 4 HOV/Managed lanes
- SR-805 from SR-52 to I-5—Addition of 2 HOV lanes